

in the next pain, a little before 9 o'clock A. M. The reason of the tediousness became evident by the delivery of a very large male infant. The patient said, as she was being placed in the position for the operation, that she had been insensible; and subsequently she has told me, that for at least a part of the time she heard what was said, but was unable to speak. The chloroform has irritated the parts to which the sponge was applied, and they are red and smarting.

January 25, 1848.

Jan. 26.—Both mother and child are doing well.

## PRACTICE OF MEDICINE AND PATHOLOGY.

*Endemic Gastro-Follicular Enteritis; or "Summer Complaint" of Children, as it prevails in the United States.*—By EDWARD HOLLOWELL, M.D., Fellow of the College of Physicians of Philadelphia, Member of the Academy of Natural Sciences, &c.—Cholera Infantum, or the "summer complaint" of children, has been considered peculiar to the United States. Billard, in his work on the diseases of infants, alludes to its occasional existence in Paris. In the United States it prevails to a great extent, and the mortality from it is extreme. It occurs in our large cities, carrying off several thousand children annually; it commences in the Southern States in May, and in the Middle and Western about the beginning or middle of June, and continues until near October, the greater number of cases being observed in July and August. It is found chiefly in the lanes and alleys of our large cities among the poorer classes of society, but those in the higher ranks are by no means exempt from its attacks. It is stated by Dr. Condie, that during a period of fifteen years, from 1825 to 1839, inclusive, 3,352 infants perished of this disease in Philadelphia, being almost ten per cent. of the whole number of infants under five years who died during that period. In St. Louis, Missouri, during the years 1841, '42, and '43, 238 children died of it. In 1823, 253 died of the same complaint in Baltimore. The average number of deaths annually in Philadelphia is about 200. The disease is confined almost exclusively to children between four and twenty months of age; cases, however, occur as early as the age of two months, and at as late a period as three or five years.

*Causes of the disease.*—Cholera infantum is considered to be dependent for its production upon a heated, confined, and impure atmosphere, acting "directly upon the skin, and indirectly upon the mucous surface, at a period when the latter is already strongly disposed to the disease from the effects of dentition, and from the increased development and activity of the muciparous follicles which takes place at that period." The circumstances of its origin, however, are involved in doubt, and can only be determined by future and more correct observation. The exciting causes are stated by Dr. Dewees to be improprieties in diet and clothing. He observes also, that it is very often aggravated by worms; but such a complication has not come under our notice.

*General description of the disease.*—Cholera infantum may be divided into three stages, based upon its anatomical characters. In their description we shall be guided chiefly by the results of our own observations.

*Symptoms of the first stage.*—This usually commences with diarrhoea, succeeded by vomiting and purging; these symptoms are soon followed by fever of a remittent type with evening exacerbations; the pulse is small, quick and frequent, occasionally full, and sometimes tense; the brain is often affected sympathetically; this condition is manifested by a tendency to delirium; the eyes have a fierce and wild expression; and the face is flushed; the stools in this stage vary much in consistence; at times they are thin and watery, but often pasty or mush-like; their colour differs also greatly in the course of the day, and from one day to another; in a number of cases they presented the appearance of chopped egg, upon which boiling water had been poured; occasionally they consisted almost entirely of mucus. The period at

which the vomiting is observed varies; it occurs usually on the second, but often as late as the fourth or fifth day; in some instances there is no vomiting throughout the course of the disease; in one case it did not make its appearance until a few days before death; the matter vomited consisted of the contents of the stomach, which were returned almost immediately after their entrance to it; these were more or less mixed with mucus; in infants at the breast the milk was returned in a curdled state, having an acid smell; in one instance it had the appearance of coffee grounds; the vomiting occurred for the most part three or four times a day, and sometimes oftener.

*Temperature of surface.*—The skin was occasionally moist, more frequently dry, warmer upon the head and abdomen; the latter is mostly warmer than the rest of the body, and often decidedly hot; the temperature of the extremities is natural, or more generally cool; occasionally it is warm; sometimes the lower extremities are cool while the upper retain their usual heat. The respiration, except in those cases complicated with other diseases, as whooping-cough or measles, was free, the number of respirations in the course of the minute amounting to 20, 21, 28, 29, 30, 33, 36, 40, 44, 48, 53, 55, 56, 60, 64, 66. When over 30 the respiration was more or less interrupted. The tongue in this stage was observed to be moist, but was often red at its tip and edges, and coated at its base with a yellowish or brownish yellow fur.

The countenance in the early stage, except when the attack was violent, was good, the eyes being bright and animated; occasionally the child would fall into a sleep from which it was easily roused. There was usually a considerable degree of irritability and restlessness, the little sufferer being pacified with difficulty. The sleep was often disturbed. The abdomen was occasionally tense and tumid, and somewhat painful on pressure; the thirst was often intense; it now and then happened, however, that drink was refused.

*Anatomical characters.*—These consist in an undue development of the follicles both of the stomach and intestines, or of one of those organs without inflammation of the mucous membrane. Children rarely die of cholera in the early stage; opportunities, therefore, seldom occur of observing the morbid appearances. M. Billard, who had ample opportunities, for the study of the diseases of children at the Hôpital des Enfants Trouvés of Paris, states that he had seen isolated follicles and follicular plexuses of the intestinal tube in considerable numbers, and developed without being inflamed in twelve infants; three were aged from eight days to three weeks, two aged two months, the remaining seven were from nine months to one year; the symptoms of the case he has published correspond so closely with those of cholera infantum, that, to use the language of Dr. Horner, it is evident had they occurred in this country, they would have been named, and in fact are cases of cholera infantum. M. Billard states that most of these children had arrived at the period of dentition, so that there appeared to be a remarkable coincidence between the appearance of the teeth, and that of the organic development of the follicular apparatus of the intestines, the follicles performing an active part in the process of digestion by furnishing the surface of these organs with a fluid which in all probability assists in the elaboration of food. Dogs, he observes, and other carnivorous animals remarkable for their digestive powers, possess this apparatus in a high degree of development. In a lioness which died in this city, some years ago, and of which I had the opportunity of making a post-mortem examination, the isolated follicles of the intestines were one fifth of an inch in diameter.

The follicles are sometimes found to exist in great numbers from the first period of life, but in general they are not very numerously developed, except at the period above mentioned, or at a still more advanced age.—(Billard.) Röederer and Wagler, in their work *De Morbo Mucoso*, in which they describe the symptoms and anatomical characters of a gastro-follicular enteritis that prevailed in Göttingen in 1760 and 1761, give very beautiful and accurate drawings of the mucous follicles in a state of abnormal development.

*Second stage.*—The vomiting which, in the commencement, was more or less frequent now occurs but seldom, while the diarrhoea continues; the stools vary much in appearance, but are more or less bloody and painful; there is also much restlessness; and the child is observed to draw up its limbs at the time of the discharge; the predominating colour of the stools is dark green, looking like chopped spinach; the colour, however, is occasionally lighter, but mixed with portions of a darker hue, or with lumps of yellow, more or less curdled. They are often of a bright yellow